



Implementation in Improving Mathematics Learning Outcomes of the Elementary School Students Using Make a Match Cooperative Learning Model

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ABSTRACT

This study employs a qualitative methodology with a descriptive approach to examine the mathematics learning outcomes of elementary school students utilizing the Make a Match cooperative learning model. The participants include fifth-grade students from class VB and their homeroom teacher at the elementary school under investigation. Qualitative data collection involves direct observation and analysis conducted on-site. Data were gathered through observations and interviews with fifth-grade teachers at SD Negeri 55 Palembang, utilizing both primary and secondary sources. The secondary data encompassed various aspects related to the research focus, such as educational facilities, infrastructure, student enrollment, among others, obtained through document analysis. However, secondary data were not utilized in this research. Data collection methods encompassed observation, interviews, and documentation. To ensure data validity, a two-stage process involving observation protocols and alternative data validity analysis techniques was implemented. Data analysis techniques included data reduction, presentation, and drawing conclusions. The findings, based on observations and interviews conducted on Monday, January 15, 2024, at SD Negeri 55 Palembang with class VB students, revealed a notable issue: a lack of implementation of the Make a Match cooperative learning model by teachers. The study highlights the significant impact of this cooperative learning model on student learning outcomes, emphasizing its potential for fostering positive student engagement, motivation, and direction within the learning process.

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INTRODUCTION

Education is an institution that has an important role in preparing and improving the quality of qualified individuals. Education acts as a forum for the formation of people who can change social life. According to Mansour Fakhri,

education plays a role in creating critical thinking, such as raising awareness of social class differences, gender differences, and other critical thinking. Humans are the main focus and main actors in education, because humans are the only creatures that have reason and mind, so it is important for humans to develop and enrich themselves through education. Education is not only a means of transferring knowledge, but also as a means of fostering students' critical thinking. Education today not only aims to create competitive learners, but also to prepare them to face future challenges and play an important role in making positive changes in society (Fitriana & Khoiri Ridlwan, 2021). The purpose of education in the school environment is not coercive and is oriented towards achieving high grades for students when learning is complete. Unfortunately, teachers often ignore and forget it. In essence, the purpose of education is to develop the personality of the individual who is learning.

Elementary school (SD) is the level of education taken after attending playgroups, early childhood education (PAUD), and kindergarten. Learning in a school environment brings not only everyday experiences, but also theoretical concepts. Learners are given instructions to improve their ideas and behavior. At the elementary level, the education system is divided into two, namely the early grades and the advanced grades, which are adapted to the development of students. In the later stages of school, children will progress in their ability to think more critically, creatively and innovatively. In this day and age, the optimal education for students is to provide them with an understanding of all aspects of their daily lives. In this way, children will acquire subject matter that better suits their needs and has a deeper significance (Fitriana & Khoiri Ridlwan, 2021). To inspire students in the learning process, teachers need to apply comprehensive and progressive methods. The use of this approach will encourage students' curiosity and stimulate them to think critically. Success can be achieved if teachers are able to develop appropriate learning methods so that the learning process can improve reading skills and the potential of students as a whole (Kurniawan et al., 2019).

Student achievement after participating in learning activities is what is referred to as learning outcomes. The abilities obtained by these students can be in the form of knowledge, attitudes, and skills that they have after experiencing the learning process. In the education process, teachers play an important role and the assessment of teacher performance is the main indicator in determining the quality of education (Rahman, 2021). Teachers play a major role in determining the quality of education depending on the role of the teacher as a teacher who directly interacts with students. Basically, learning is a process in which learners interact with the surrounding environment so that there are

changes in more positive behavior. In an effort to improve the quality of learning, teachers need to improve their teaching expertise so that students can achieve maximum potential despite the fact that many teachers in Indonesia still use traditional learning methods. If learning strategies are not used appropriately, it can hinder the achievement of learning objectives because learning strategies are one of the factors that can influence learning objectives. Teaching models are used as one of the methods to implement a learning strategy. Teaching models can be a valuable tool for teachers to facilitate and reinforce learning in the classroom. In Fathurrohman's view, the learning model can be interpreted as a method or strategy used to obtain the desired results, the teacher needs to convey the content of the lesson to students in an appropriate way (Nurhasanah, 2021).

Based on observations as well as conducting interviews with one of the teachers at the research school, it was found that the teacher rarely used learning models and had not fully utilized them, so he only relied on conventional learning models and printed book media during class hours. This results in students feeling that learning becomes monotonous and less interesting, making them feel sleepy during class hours. In addition, they often leave the class with the excuse of going to the toilet when the teacher is explaining so that student learning outcomes are also low.

There is a suitable solution to be applied to overcome the above problems, namely by applying the make a match cooperative learning model. In this learning model, students are actively involved in the learning process because they are asked to observe and search for information, as well as match questions with answers. In addition, students also work together in groups, present the results of the discussion and give their opinions on the topic being studied. They are also taught to ask questions and listen to opinions from other group members, so they can better understand difficult concepts. Students also conduct experiments by making pieces of food ingredients that have been learned using real objects. In addition, the Make A Match learning model is a new form of learning model that is expected to increase student interest in learning and provide student motivation in the learning process. Descchuri et al (2016) argue that the application of Make A Match technique in cooperative learning model can increase students' motivation because of the interesting game element. In addition, students are also actively involved in the learning process. The Make A Match technique has the ability to create an interactive and effective classroom atmosphere in training students' courage, and is able to overcome student boredom during the learning process. Meanwhile, according to Ernawati (2016) the Cooperative Learning Model prioritizes collaboration

between students in one team. The reason is because students tend to find it easier to express and understand a concept if they discuss the problem with their classmates. Cooperative learning models consist of several types, such as Jigsaw, Think-Pair-Share, Numbered Heads Together, Group Investigation, and Make a Match (Haruna & Darwis, 2020).

Researchers have an interest in researching with the title: "implementation in improving elementary school students' Mathematics learning outcomes by using the make a match cooperative learning model".

RESEARCH METHOD

This research uses a qualitative method with a descriptive approach. This research has an object, namely the mathematics learning outcomes of elementary school students using the make a match cooperative learning model. The informants in this study are VB class students and also VB class teachers in elementary schools. The data used is qualitative data, qualitative data collection is done by going directly to the location to make observations and analyze the data. Data was taken from the results of observations and interviews of fifth grade teachers at SD Negeri 55 Palembang. And also the data sources in this study are primary and secondary data. Primary data is the main data collected directly by researchers from the object of research. The data obtained for this study came directly from students and teachers in class VB at SD Negeri 55 Palembang. Secondary data is a data source that can be used as a support for the main data in the view of the researcher. The data obtained came from educators, school administrators, and documents stored in educational institutions. This category of information includes educational facilities and infrastructure, educational facilities, the number of students, and all aspects related to the issues being studied by researchers through documents. This study did not use this secondary data. The data collection techniques in this research are observation, interviews and documentation. In data validity techniques with two stages, namely observation and data validity analysis techniques, namely using something else. Data analysis techniques use data reduction, data presentation, conclusions.

RESULTS AND DISCUSSION

This research covers the application to improve mathematics learning outcomes of elementary school students through the use of the make a match cooperative learning approach. The research was conducted at an elementary school in Palembang located at Jalan Bambang Utoyo. The information was

obtained through observation, interaction with teachers and students, and documentation collection.

Implementation of cooperative learning model using make a match method. The make a match cooperative learning model is one of the methods applied in the teaching and learning process. This method involves students in observation, information seeking, and matching questions with relevant answers. Using the make a match cooperative learning method aims to assist teachers in delivering material and improve students' ability to receive material easily. This method also encourages students' interest to want to know more, so that it can arouse students' enthusiasm for learning without feeling bored, especially in learning mathematics. Thus, the teacher has explained the material in an interesting way so that students can easily understand. That is why, the author conducted observations of teachers and also conducted interviews with teachers and students at SD Negeri 55 Palembang.

The results of observations that have been carried out on January 15, 2024 researchers have found that at SD Negeri 55 Palembang in learning in class VB is carried out face-to-face and using a mathematics learning model. Sometimes, teachers also use the make a match cooperative learning model in delivering learning materials in the classroom. During the learning process, teachers utilize the facilities available at school to deliver the material in accordance with the learning objectives.

This aims to make the learning process easier.

Table 1.
Observation Results

Number	Observation Aspect	Student Response	Score			
			VG	G	F	L
Initial Activity						
1.	The teacher starts the learning activity and organizes the class (greeting, checking students' attendance, praying, and focusing on learning activities).	<ul style="list-style-type: none"> • Students look ready to learn • Students respond by greeting the teacher.. 	✓			
2.	Teacher gives apperception	<ul style="list-style-type: none"> • Students focus on looking • Students stare at the teacher 		✓		
3.	Teacher gives	<ul style="list-style-type: none"> • Students look happy 			✓	

Number	Observation Aspect	Student Response	Score			
			VG	G	F	L
	motivation	<ul style="list-style-type: none"> Students are more eager to learn 				
4.	Teacher prepares the cards that will be used	<ul style="list-style-type: none"> Students look interested when the teacher prepares the make a match model cards Students are enthusiastic during learning 				✓
5.	Teacher explains learning objectives	<ul style="list-style-type: none"> Students understand learning objectives 			✓	
Core Activity						
6.	Teacher conditions students to be ready to watch how the cards work	<ul style="list-style-type: none"> Students are interested in the use of make a match cooperative learning model. 				✓
7.	Teacher explains the material	<ul style="list-style-type: none"> Students have enthusiasm to follow the learning process When learning using the make a match cooperative learning model is taking place, students focus their attention on the teacher Students' focus is on the content of the lesson 			✓	
8.	Teacher tries and practices how the cards work	<ul style="list-style-type: none"> tudents actively ask and try 			✓	
9.	The teacher relates the cards to the material	<ul style="list-style-type: none"> Students stay focused during the 			✓	

Number	Observation Aspect	Student Response	Score			
			VG	G	F	L
		lesson				
Final Activity						
10.	Teacher directs students in summarizing the content of the material that has been taught	<ul style="list-style-type: none"> students make conclusions based on their understanding 	✓			
11.	Teacher gives assessment in the form of a collection of questions	<ul style="list-style-type: none"> Students give answers to the teacher 		✓		
12.	The lesson is closed by the teacher	<ul style="list-style-type: none"> Students reply to the final greeting 	✓			

In the interview, one of the other options that can be used in supporting learning activities is the use of the make a match cooperative learning model. According to one of the teachers, a learning model is described as a design that tells the details of the process and creates an environment where students can interact so that changes or progress occur in students. A learning model is a particular learning strategy or method used and implemented to achieve learning objectives or competencies in a more effective and efficient way. If this is successful, it shows that the learning model has succeeded in changing and improving the quality of the student's learning. Meanwhile, the Make A Match learning model is a cooperative learning method that involves finding pairs through using cards. The card contains a collection of related questions and answers in the form of cards. Make A Match model is one type of method in cooperative learning. One of the advantages of this method is when students look for each other to learn to understand a concept or topic in a fun atmosphere.

The use of the make a match cooperative learning model for the classroom is still quite rare. However, there are benefits if we are able to apply it, in addition to avoiding boredom and often going in and out of class for students, we can also provide knowledge by using a variety of learning methods. The make a match cooperative learning model has a positive impact on students' enthusiasm for learning in mathematics lessons in the classroom, so that students become more enthusiastic and excited in following the learning material.

Table 2.
Interview Results

Number	Question	Answer	Result
1.	What do you understand about learning models?	According to my knowledge, a learning model is a particular learning strategy or method used and implemented to achieve learning objectives or competencies in a more effective and efficient way.	Teachers understand the learning model
2.	What benefits do you feel when using learning models?	The benefit for me is that it makes it easier for me to convey material or explain. Then it attracts students' attention to follow the lesson too. Learning is more practical and understandable.	Making it easier to deliver material and practical
3.	Have you ever heard of the make a match cooperative learning model?	Yes, I have. The learning model is usually in the form of paired cards.	Teachers have heard of the make a match cooperative learning model.
4.	What do you understand about the make a match cooperative learning model?	A model that uses cards, and the cards have pairs, such as matching or pairing the correct cards.	Teachers understand the make a match cooperative learning model
5.	What is your view on the utilization of the make a match cooperative learning model?	The utilization of the make a match cooperative learning model for the class is still fairly rare. But it is good if it can be applied, besides students not getting bored quickly and often going in and out of class, we can also provide knowledge with this learning model.	So the teacher considers that the make a match cooperative learning model can eliminate students' boredom

This research is supported by Eka Desy Aryani (2020) in her research entitled "Application of Make A Match Type Cooperative Learning Model in

thematic learning to improve learning outcomes of grade IV students of Madrasah Ibtidaiyah Ziyadatul Iman Jambi City" succeeded in improving the learning outcomes of grade IV students of Madrasah Ibtidaiyah Ziyadatul Iman Jambi City. It can be observed in each cycle, there is an increase in the percentage of students who successfully complete the learning. In the first cycle, the average percentage of students who succeeded was 63.82%, while in the second cycle it increased to 88.82%. Based on cycle I and cycle II, there was an increase in student learning outcomes by 25%.

The Make A Match type cooperative learning model was also applied by Ardiana Maulidah (2019) in the initial condition of Indonesian students having an average score of 63.7 with a percentage of 46.15%. However, in cycle I there was an increase to 72.7 with a percentage of 69.23%. In cycle II, there was another increase to 78.4 with a percentage of 80.8%. In addition to Indonesian, it was proven that learning outcomes also improved in Mathematics. At first, the percentage of learning outcomes was 42.3% with a score of 64.1. Then, in the first cycle there was an increase to a score of 69.5 with a percentage of learning outcomes of 57.7%. Furthermore, in the second cycle there was another increase to a score of 77 with a percentage of learning outcomes of 80.86%.

CONCLUSION

After conducting observations and interviews on Monday, January 15, 2024 at SD Negeri 55 Palembang with class VB students, the observer found a problem, namely the lack of applying the make a match cooperative learning model by teachers to students. The make a match cooperative learning model has a significant impact on student learning outcomes. One example of students without the use of learning models includes students who look less enthusiastic in completing tasks, do not show interest in learning, and often cheat when facing tasks given by the teacher. Teachers can use this positive bond to encourage and direct students in their learning process. Teachers know various kinds of learning models, but their application is not optimal. With this research, teachers can find out more deeply what things can make students excited and interested in learning. So that teachers also have the desire to apply learning models, especially the make a match cooperative learning model.

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